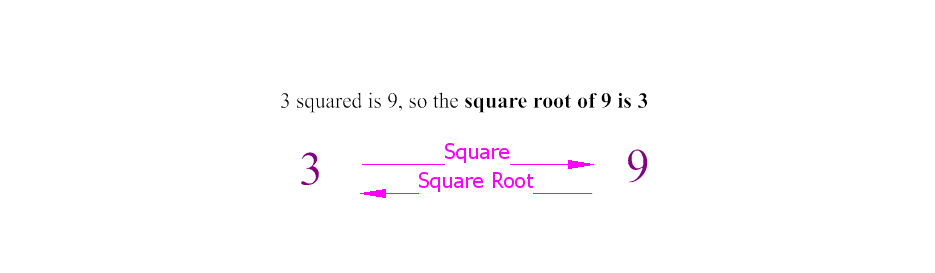
Math 9 **N9.3 Squares and Square Roots**

Definitions:

1. Square - is a number multiplied with itself.

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2. Square Root - of a number is one of the two equal factors of the number.

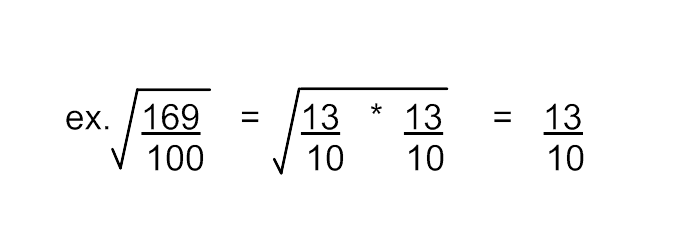
**Squares and square roots are inverse operations.**

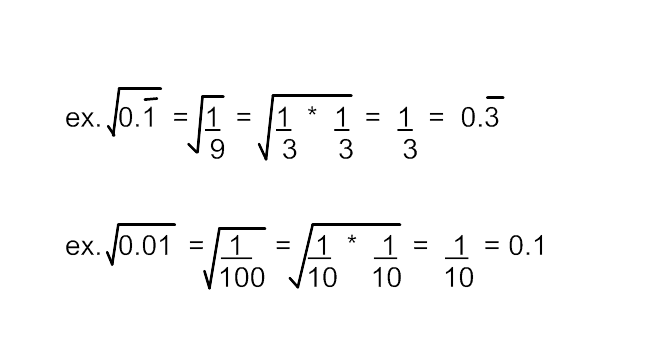
Perfect Squares

A number is a perfect square if it is the product of 2 equal factors.

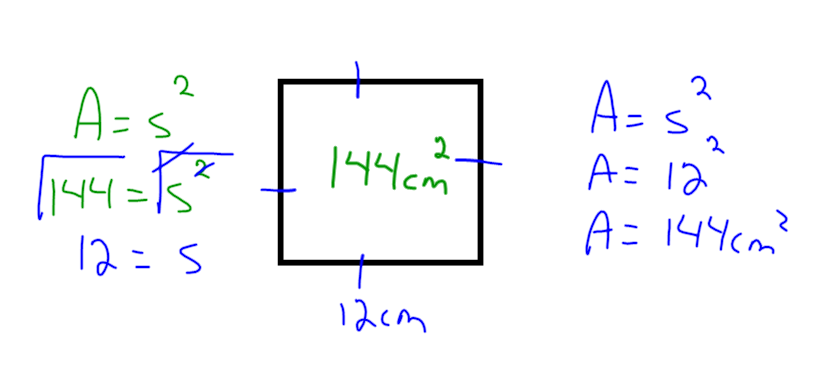
ex. 25 is a perfect square because 25 = 5 \* 5

ex. 24 is not a perfect square because it is not the product of 2 equal factors.

A fraction in simplest form is a **perfect square** if it can be written as a product of two equal fractions.

When a decimal can be written as a fraction that is a perfect square, then the decimal is   
also a perfect square. The square root is a terminating or repeating decimal.

How do square roots and squares relate to a one dimensional square???



The area is the square of the side length.

The side length is the square root of the area.

You can use the square roots of whole numbers to determine the square roots of fractions by looking at the numerator and denominator separately.

You can use the square roots of whole numbers to determine the square roots of decimals by ignoring the decimal to begin with; find the square root and then put the decimal into your final answer.